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ABSTRACT

This report, seventh of eight in a series, discusses the views of California parents about the significance of a child's early years, their preparation for parenting, and how well their communities meet their child care needs. The California Center for Health Improvement's (CCHI) Children and Youth Survey asked California parents several questions about child development. When parents were asked when the greatest amount of brain development occurs in children, nearly half did not correctly identify the years from birth to age 3. Fifty-seven percent of fathers were unaware of the importance of the first 3 years, while 37% of mothers were unaware. The first years influence all subsequent development, but the path from birth to school entry is a path Californians are supposed to negotiate largely on their own. The CCHI survey asked parents how prepared they were to raise their first child. A third said they were not well prepared, or not at all prepared, for parenting; another third said they were only somewhat prepared. Some programs are being developed to address these issues, and other initiatives show that policy makers are considering issues of child care. Child care services, school-linked early intervention, and developmental services are all part of a broad public infrastructure of child development in California, but these components do not yet function as a well-integrated system. Steps toward integrated service delivery, including expansion of the Healthy Start program, are being made. To maximize the development potential of young children, families need basic support between a child's birth and entry into school. Policy recommendations are made in the five areas of: (1) parent education; (2) family resource centers; (3) parenting support; (4) quality child care; and (5) a statewide child development program. (Contains 6 tables and 17 references.) (SLD)

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Growing Up Well
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Brain Development: Nearly Half of California Parents Unaware of Important First Three Years

By Miles Hochstein, Ph.D., and Neal Halfon, M.D., M.P.H.

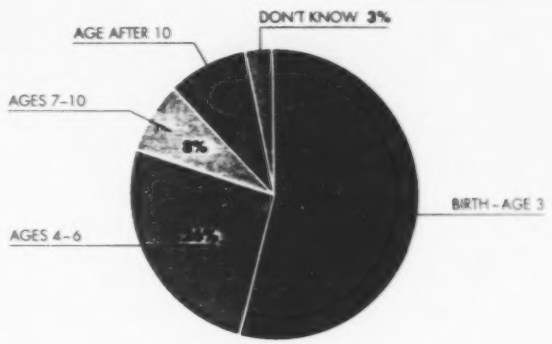
Scientific research shows that during the first three years of a child's life, the underlying physical architecture of a child's brain is established (1). This architecture develops through a complex interaction between the child's genetic makeup and the child's environment, including the interaction a child has with parents, family and other caregivers. While a child's genetic makeup creates potential, it guarantees nothing in the absence of appropriate nurturing and experiences (2). A child's ability to sit calmly in a classroom at age 7, cope with everyday frustration at age 10, or participate in a team sport at age 13 may all be affected by experiences in the first years of life.

The California Center for Health Improvement's (CCHI) *Children and Youth Survey* asked California parents when the greatest amount of brain development occurs in children. Nearly half of parents surveyed, 46 percent, did not correctly identify the early years from birth to age three (table 1). The largest gap in awareness is between fathers and mothers.

TABLE 1

Many Parents Unaware Greatest Amount of Brain Development Occurs During Child's Early Years

During what period in the life of a young child do you think the greatest amount of brain development takes place?



Source: *Children and Youth Survey*, The Field Institute, October–November 1997.

Fifty-seven percent of fathers are unaware of the importance of the first three years, while 37 percent of mothers are unaware (3). These findings reveal a serious lack of understanding among California parents about brain development in the early years of a child's life and the foundation it lays for future child, adolescent and adult development. This lack of awareness is analogous to pregnant women not being aware that cigarette or alcohol consumption is harmful to the fetus.

Understanding Early Child Development — Five Essential Considerations

Research in the fields of medicine, neurology, psychology and linguistics, among others, offers five important insights about child development and the early years from birth through age three (1). These insights are particularly critical considering most brain development occurs in a child's early years while public spending for children is focused on the years after the majority of brain growth has occurred (table 2, page 2).

ABOUT THIS REPORT

A child's early years, from birth through age three, are a critical period. Care-giving during these years affects the structure and functioning of a child's brain and how a child will behave, learn, feel and perform. At the same time, the challenges of parenting are numerous, and new parents often find themselves unprepared as they encounter the competing demands of child rearing, managing their family and making a living. In this seventh of eight reports in the *Growing Up Well* series, the views of California parents about the significance of a child's early years, their preparation for parenting, and how well their communities meet their child care needs are discussed. The data reveal parents need more information, parenting support and quality child care services. Communities, schools, policy-makers and parents have a strategic opportunity to jointly address these needs.

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1. Alcohol, drugs and poor nutrition are harmful to the developing brain of a fetus and a child, while good maternal nutrition and breast-feeding offer substantial, long-lasting benefits. Drugs and alcohol can profoundly harm fetal brain growth. Pregnancy and early childhood are critical developmental periods, during which fetal exposure to harmful substances can have consequences for life-long health (4). Poor maternal and infant nutrition is associated with developmental delay in children, while breast-feeding is considered to facilitate brain development and infant health (5). In addition, tobacco use during pregnancy is developmentally harmful and associated with lower birthweight.

2. Genetics and the environment interact in complex ways. Brain development is not genetically predetermined, but occurs as a consequence of a child's experience in the physical and social environments and the way in which those experiences affect the child's genetic predisposition. The structure and functioning of the brain, and the extent to which a child's brain manifests its genetic potential, are directly changed by a newborn's experience with caregivers. For example, the creation of a secure attachment relationship between a child and one or more dependable caregivers is important both for social competence and for physical development of the brain. Early caregiving not only affects future social skills and confidence but also the structure and functioning of the brain itself and, consequently, how a child will behave, learn, feel and perform (6, 7, 8).

3. Young children need developmentally appropriate interaction during critical periods. While brain development is somewhat flexible, it is primed for certain kinds of experiences at particular stages of development. Although children need supportive relationships throughout childhood, there are critical periods when specific skills and emotional response patterns are developed. For example, the child whose mother is depressed during the first year of life is more likely to suffer motor delays, whereas experiencing maternal depression in the second year is associated with language delays (9). Similarly, *parentese*, the way in which mothers and fathers use a higher pitched tone and simplified words to speak to very young children, is found in every culture and is a type of developmentally appropriate interaction that helps children acquire language.

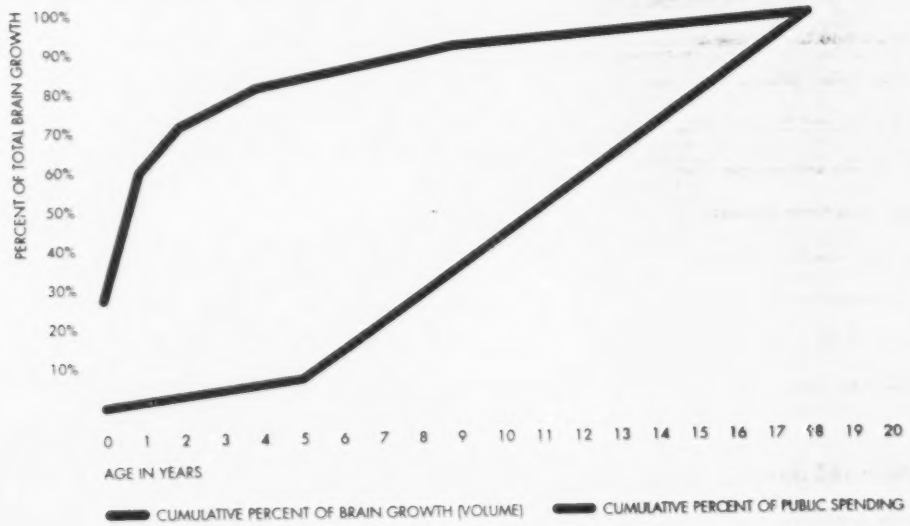
4. The first years influence all subsequent development. The first three years of life are a pivotal time for the future of a child, during which the neuronic building blocks of future emotional, cognitive and motor skills are built. Between birth and the third year of life, the number of neural connections in a child's brain expands exponentially, ultimately creating 1,000 trillion synapses by age three, far more than any adult has (1). Early experiences etch themselves upon the structure of the brain at this time, so that, for example, when a child receives dysfunctional behavioral responses from a depressed caregiver, many of the behavioral responses that grow out of the child's relationship with that caregiver can be significantly impaired (10).

5. Parents can improve their parenting skills and they need support. Parenting makes a difference for the health and development of children. Awareness of the facts about early child development is of little value unless parents understand their own capacity to choose between alternatives

TABLE 2

Brain Growth vs. Public Spending for Children

While the brain grows most rapidly during the early years of life, public spending for children is focused on the years after the majority of brain growth has occurred.



Source: R. Haverman and B. Wolfe "The Determinants of Children's Attainments: A review of methods and findings," *Journal of Economic Literature*, Vol. 33 December 1995, pp. 1829–1878; Blinkov SM, Glezer II. *The Human Brain in Figures and Tables: A Quantitative Handbook*. Basil Haigh, translator. New York, Basic Books; 1968.

and create the kind of early environment that their children need. Parents who believe that they can make a difference in their child's development and are supported in their efforts will be able to do so. Early intervention programs and other services can help assure parents provide the secure and supportive environment children need in their early developmental years (11).

Meeting Child and Family Needs

The path from hospital discharge following birth to school entry approximately five years later is a path which California families are expected to negotiate largely on their own. Yet the early years have profound consequences for the future quality of life of all Californians.

Changing Capacities of Families

In recent years, the capacity of families to help their young children make the journey from birth to school entry has been severely affected by economic stresses and changes in family structure. Child rearing and parenting are particularly difficult for families in poverty, and poverty continues to afflict millions of California children. It is estimated that 26 percent of California children live in families with incomes below the poverty level, compared to about 20 percent of children nationally (12).

While the challenges of caring for young children are particularly demanding for low-income families, these challenges are shared by families of all income levels. A recent Commonwealth Fund Survey of Families with Young Children showed that parents widely report that they lack sufficient time for their families (13). Consistent with these national findings, less than half, 44 percent, of California parents surveyed by CCHI's *Children and Youth Survey* said they are satisfied with the amount of time they spend as a family (3). Changes in family structure, including a growing number of single parents, declining involvement of extended family members and an increase in blended families with children from multiple marriages, all have introduced new kinds of stresses into family life. Instability in family life is reflected in the doubling of the national divorce rate in the past decades since 1960 and in high rates of residential mobility. This instability often disrupts ties to neighborhood networks, health providers and other sources of support, and is associated with poorer health outcomes (14).

Preparation for Parenting

Parents face a variety of challenges and stresses as they raise their children through the early years and beyond. CCHI's *Children and Youth Survey* asked California parents with children under the age of 18 how prepared they felt they were to parent their first child. A third, 33 percent, of California parents surveyed said they were not very or not at all prepared for parenting when they became parents. Another third, 35 percent, said they were only somewhat prepared (table 3).

Throughout the state, community-based organizations are responding to this need. For example, in Vacaville, California, an intensive parenting support program has been established to assist parents, particularly those with young children (see sidebar, page 5).

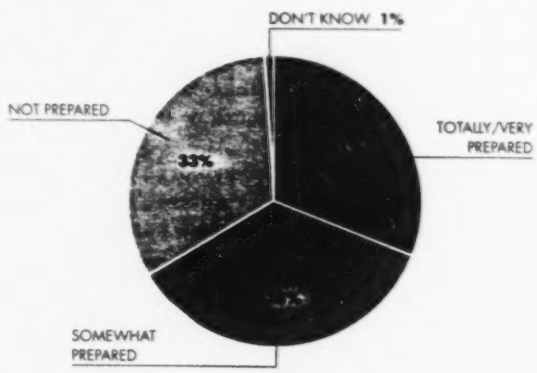
The fact that two-thirds of California parents felt either unprepared or only somewhat prepared for parenting demands attention from policy-makers. A strategic opportunity is available for public policy to both support parents as they take on the challenges of parenting and to inform them about the crucial importance of the early years of child development. Several bills are currently under consideration by the Legislature to address the needs of young children and families:

- SB 1525 (Alpert) would establish a home visiting program targeting at-risk families; family support services designed to improve parent-child interaction would be provided to the family during the mother's pregnancy or at the time of childbirth and would continue through a child's early years.
- AB 2623 (Ortiz) would establish a Commission for the Development of the Master Plan for Universal Preschool to develop a design for full implementation of universal preschool for all children 3 and 4 years of age.
- SB 2155 (Alpert) would establish a State Commission on Children, Youth and Families to prepare a strategic plan to improve the quality of life of California's children, youth and families.

TABLE 3

Prepared To Parent Their First Child? A Third of California Parents Say "No"

Thinking back to when you first became a parent, how well prepared were you for parenthood?

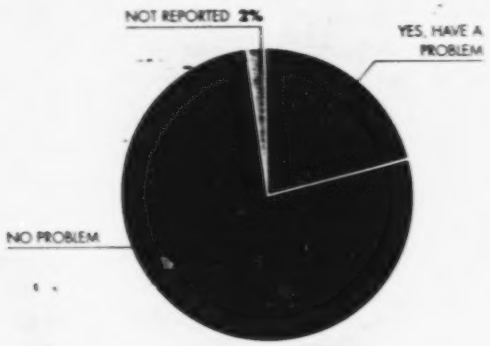


Source: *Children and Youth Survey*, The Field Institute, October–November 1997.

TABLE 4

One in Five California Parents Has a Problem Obtaining Child Care Services

Is obtaining child care services a problem for you or not?



Source: *Children and Youth Survey*, The Field Institute, October–November 1997.

In addition, California voters will have the opportunity in November 1998 to consider a ballot initiative creating the *California Children and Families First Program*. This initiative would raise tobacco taxes by $.50 per pack of cigarettes and dedicate an estimated $700 million in revenue to establishing comprehensive early childhood development and smoking prevention programs at the county level.

Critical Role of Child Care

The growing number of women in the workforce and the need of families for two incomes have vastly expanded the number of children in child care arrangements. About 60 percent of women with preschool-age children are in the labor force, including mothers of one year olds (14). Moreover, implementation of welfare-to-work requirements under federal welfare reform, known as CalWorks in California, is resulting in a large increase in the number of children, including very young children, spending a significant portion of their days in child care. These societal and policy changes are resulting in an ever growing need for child care programs.

While the placement of young children in child care has become the norm in the U.S. and California, national evaluations of child care suggest that only about one-third of care provided is of good quality. Another third is adequate, but could be better and a final third may actually be developmentally harmful. For too many children, mediocre care is the rule (15).

Currently in California, child care services are provided by school districts, private licensed and unlicensed child care providers, public and private preschools and through the CalWorks program. While many of these services are of high quality, others are not. Continuing and expanded oversight of these services is needed to assure quality and developmental effectiveness. Given the large number of children who will need care as a result of welfare reform, evaluation of child care provided through the CalWorks program will be important.

Local programs, such as Child Care Resource and Referral Networks, play a key role in assisting parents obtain child care for their children. Yet, finding affordable and high quality child care remains a difficult problem for working families. Furthermore, parents find it difficult to evaluate the quality of the child care upon which they must rely (15). One in five, 21 percent, of California parents surveyed by CCHI's *Children and Youth Survey* said they had difficulty in obtaining child care in their communities (table 4). Moreover, half of parents surveyed, 50 percent, said their community was a poor or only fair place to obtain quality child care for working families (table 5).

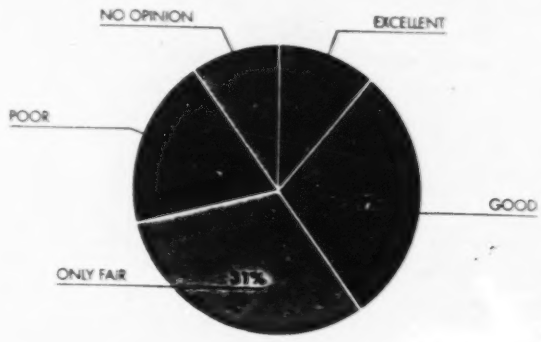
Early Intervention and Developmental Services

While all children need appropriate care from parents, friends, relatives and child care providers, many children also need additional services at varying levels of intensity. Several federal and state programs are available for families and children with higher levels of need, such as those associated with the Individuals with Disabilities Education Act (IDEA), the CalLEARN

TABLE 5

Half of Parents Say Their Community Does a Poor or Only Fair Job Providing Quality Child Care Options

How would you rate your community as a place that provides quality child care options for working families?



Source: *Children and Youth Survey*, The Field Institute, October–November 1997.

program for teenagers with children, Head Start and, more recently, Even Start, an early childhood program for children at risk for developmental delay. These programs often focus on both parents and children and have a proven impact on the developmental outcomes of children and the health of families. However, the availability of many higher intensity services is limited. Existing programs often target a narrow population or issue, are limited geographically and do not reflect a comprehensive approach that incorporates population-based risk assessment and need-based intervention (12). In contrast to California, several states, such as Vermont, North Carolina and Hawaii, are assessing the need for services of all children through a risk assessment process. Such a process assures early identification of child and family needs and delivery of necessary support services at an appropriate level of intensity.

In addition to programs oriented to specific developmental delay problems, interventions oriented to broader social risk factors have great potential. Some of the best evidence of the effectiveness and cost-effectiveness of early intervention for generalized social risk is provided by a nurse home-visiting project (16). In a major review of early intervention programs in the U.S., it was found that under specified conditions early childhood interventions can support emotional and cognitive development, improve educational outcomes and improve economic well-being and health for children or their mothers. Careful targeting of higher cost interventions to higher risk families has been found to be particularly important if social savings are to exceed program costs (17).

Comprehensive Approaches for Serving Children And Families

While child care services, school-linked early intervention and developmental services are all part of a broad public infrastructure of child development in California, these components do not yet function as a well-integrated system. However, important steps toward integration are being made. These include expansion of the Healthy Start program statewide and development of family resource centers.

Healthy Start

Recognizing that educational success, physical and mental health and family well-being are interrelated, California's Healthy Start program links students and their families to schools and supporting community resources and institutions. This approach promotes coordination and integration of services for school-age children and their families. Nearly 2,000 schools in all 58 California counties are participating. Approximately 400 school districts have programs under way and nearly 200 others have received state planning grants to develop programs, offering the potential to serve a half million young people.

While further research is needed, the limited research that has been done on the effectiveness of operational Healthy Start sites suggests that significant gains have been made in school attendance, grades, standardized test scores and school safety. In addition, families have been noted to be better able to meet their child care, employment, household and general needs, and parents have become more involved in school activities.

Family Resource Centers

In California and nationwide, family resource centers (FRC) provide a range of family support services. For example, The Hope Street Family Center in Los Angeles, California, provides an important model of how a range of parenting and support needs for children and families at elevated risk can be met at a single location using a combined professional and parent staff. Based at California Medical Center, Hope Street serves as a one-stop-shop for home visitation programs, Early Start, child care, after-school and mentoring programs, adult education, English as a Second Language (ESL) classes and a wide range of parenting supports. Hope Street makes it possible for families to gather for educational and recreational opportunities, become involved in community activities and offer input to service providers.

Focusing on Family Needs

In the City of Vacaville, California, helping parents, particularly young parents, meet the needs of their children is a high priority. To better understand family needs, eighty low-income parents were interviewed, many of whom were single parents. Many parents said they felt isolated in their parenting responsibilities, and most said they could use help in raising their children.

In response, an intensive parenting support program was established by the Healthy Vacaville Task Force. The program offers a parent support group, parenting classes focused on the needs of participating parents, age-appropriate developmental child care, scheduled activities for parents and their children, mealtime activities and other supports.

Vacaville, along with six other cities in the county, is a part of the Solano Health Improvement Initiative, a countywide collaborative effort led by the Solano Coalition for Better Health. This effort focuses on a common goal — assuring that all children in the county will be healthy and ready to learn when they enter school.

The Coalition includes community members and service providers, healthcare providers, the county health and social services agency and representatives of the faith, education and business communities. The Coalition's efforts are supported by The California Wellness Foundation, as a part of its Health Improvement Initiative. For more information, contact 707 651 3680.

A family resource center similar to Hope Street has been established in a shopping mall in Orange County, California by the Orange County Children's Hospital. Similarly, centers are serving the needs of three neighborhoods in Oceanside, California (see sidebar, page 7). In addition, creation of FRCs is either under way or being considered in many other parts of the state. Expanding the development of FRCs throughout California could be particularly valuable for families with young children by helping address unmet needs.

While further evaluation is necessary to determine the best combination of services to include in FRCs, other states have recognized the potential of these centers and begun implementing them statewide. For example, the Kentucky Educational Reform Act (KERA) of 1990 mandated their development.

Whether located in a hospital setting, in a shopping mall, in a school setting or another alternative, family resources centers can serve three critical functions for families:

- Provide one-stop-shopping for parents and children to obtain assistance. With representation from all relevant agencies and schools, FRCs are able to provide an access point to health, mental health, social, employment, educational and basic support services.
- Provide an organized structure for family involvement and for conducting outreach to families within the community. Centers can either provide or arrange for a variety of services, such as health promotion, nutritional education, social services, prevention programs, adult education, parent education programs, child care services, parent-led support groups, recreational opportunities and community involvement and mentoring efforts.
- Enhance community input and participation, local agency collaboration and integration and involve employers in developing child care options and solutions.

Participation of school districts and local schools will be essential as more communities implement FRCs in California. Schools must play a key role. They are the institutional destination point for infants and preschool children and they are called upon to address many of the educational and behavior problems early intervention programs help prevent. In addition, local schools are a universally-known community resource and families are typically accustomed to going there for educational services. The leadership many schools have shown in implementing Healthy Start underscores the importance of their involvement as more communities establish FRCs.

Building a Bridge of Support from Birth to School

Families need basic supports between a child's birth and the child's school entry to maximize the developmental potential of young children. These include health insurance coverage and health system access; healthcare follow-up, such as home visiting, after a child's birth; quality child care options for newborns and infants; and quality preschool options. They also include parent-friendly workplace policies, such as flexible work hours for parents with young children and policies which support breast-feeding mothers; community-based outreach efforts to assist parents with young children; and early involvement by local schools with their future students.

A *bridge of support* from hospital birth to school entry needs to be developed which:

- Provides a range of child and family support services at easily accessible locations, such as family resource centers;
- Provides referral and linkage to ancillary support services;
- Builds upon existing institutions and professionals, including hospitals, health plans and healthcare providers who are involved at the beginning of a child's life;
- Links with primary schools in which young children will enroll in a few years;
- Links with child care and preschool services; and,
- Involves local businesses, community-based organizations and community leaders.

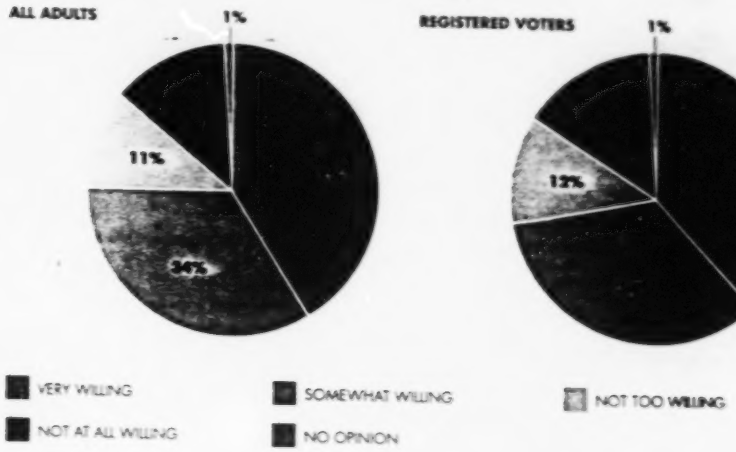
For example, the availability of family support services, particularly quality child care, has the potential to provide an important benefit to employers. Employees who are confident about the care their children are receiving, or have support in addressing the challenges of raising their children, have a greater ability to devote their full attention and focus to their work. At the same time, employers can provide important support to workers with children by taking steps to make their workplace policies friendly to workers with young children. For example, employers can adopt policies which make it easy for mothers with young children to breast-feed. Many women return to work shortly after the birth of their children. Yet, it is often difficult for mothers to continue to breast-feed their children. Employers could provide pumping rooms and flexible work hours for lactating employees (5).

Medical, educational, social service and business interests can work together to create a system of care, a genuine bridge of support for families with young children. However, progress toward systematic creation of this bridge will only be possible with far-sighted state and local policy leadership and public support. California adults believe early intervention with young children is valuable. When asked by CCHI's *Children and*

TABLE 6

More Than Seven in Ten Willing to Pay More Taxes to Make Child Care Services More Available for Young Children

How willing are you to pay more in taxes to make child care services for young children more available for the children and families in your community?



Source: *Children and Youth Survey*, The Field Institute, October–November 1997.

Youth Survey how effective they thought providing support for new parents might be to insure that children get a safe and healthy start in the early years of life, nearly nine in ten adults surveyed, 89 percent, said they thought such services would be extremely or somewhat effective (3). In addition, three-quarters of California adults said they are either very or somewhat willing to increase taxes to provide additional child care services in their community (table 6).

Policy Recommendations

Concrete steps must be taken to rectify current gaps in public knowledge and awareness about the importance of early childhood and provide necessary support to families so that maximum gains are made in child development and health outcomes for all California children. A five-part strategy is recommended.

Parent Education. Launch and evaluate a multi-year education program targeted at changing the skills and attitudes of future parents. The program will lead to greater public understanding about the urgency of investing early in children to promote maximum child development.

Family Resource Centers. Make greater funding available to expand development of family resource centers and evaluate the effectiveness of different FRC models and service combinations. To generate additional funding, new resources for FRCs could be tied to matching funds from local hospitals and other community resources. FRCs offer an important platform from which to coordinate and initiate a number of vital services for children, including parenting support and child care services.

Resource Centers Assist Three Neighborhoods

Thirty-five organizations providing medical, education, employment, housing, financial, cultural and social services are collaborating with community residents through *Partners for Healthy Neighborhoods* to improve the health of three neighborhoods in Oceanside, California. Focused on improving self-sufficiency and community cooperation, the collaborative has established Resource Centers in each neighborhood to help residents identify and address their personal, family and community needs.

Recently, *Partners* conducted a public education campaign to help families, particularly those with young children, learn how to make their homes safer through preventive steps, such as covering electrical outlets, installing smoke detectors, locking up medicines and keeping household cleaners out of reach. Working with the California Healthy Cities Project, electrical outlet covers were provided to families with children.

Beyond providing information, Resource Centers link residents in these three neighborhoods with organizations providing healthcare, counseling, education, employment, legal and emergency services; provide assistance with job applications and resumes; and offer a number of other family support services. *Partners for Health* is funded by The California Wellness Foundation as a part of its Health Improvement Initiative. For more information, contact 619 757 9980.

Parenting Support. Develop a parent-led, professionally-assisted parent support program that offers classes and teaching opportunities for parents to work with other parents to improve their parenting skills and understanding of their children's developmental needs. The programs should incorporate an evaluation component.

Quality Child Care. Enhance state efforts focused on assuring availability of developmentally appropriate child care, promoting child care quality, expanding the supply of appropriate training services and trained child care providers and providing wages sufficient to retain qualified child care providers.

As CalWorks programs create new demand for child care, the state will also need to evaluate the extent to which county CalWorks programs are successful in assuring the availability of quality child care for working parents.

Statewide Child Development Program: A Bridge from Birth to School Entry. Initiate a statewide early childhood program to provide designated funds to counties to create integrated networks of care for children from birth to age five. These networks would facilitate delivery of necessary healthcare, child care, early intervention, mental health and family and parenting support services.

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